ABSTRACT

The object of the present invention is to provide a material for an aperture grille for use in a color picture tube, which has an excellent yield strength, high temperature creep strength and superior magnetic characteristics to prior materials and provide a producing method therefor, an aperture grille made thereof and a color picture tube incorporating the aperture grille. In order to achieve the object mentioned above, the method of the present invention comprises the steps of cold-rolling a low carbon steel sheet containing 9 to 30 wt% of Ni, or 9 to 30 wt% of Ni and 0.1 to 5 wt% of Co; and annealing the cold-rolled steel sheet at a temperature of 400 to 500°C. Alternatively, the method comprises the steps of: cold-rolling the low carbon steel sheet same as mentioned above; subjecting the cold-rolled steel sheet to process-annealing at a temperature of 500 to 800°C and another cold-rolling; and thereafter annealing same.